WO 2004/058345 PCT/EP2003/013610

## Claims

1. An electrode pack with at least two flat electrodes (2, 2') to be placed against a patient, which have flat contact areas (2.2, 2.2') provided with a gel on an electrode body (2.1, 2.1'), as well as connecting cables (5), and are provided with airtight connecting means (3, 6, 7),

characterized in that

the closing means (3, 6, 7) have sealing means (7, 7.1; 6.1) which surround the contact areas (2.2, 2.2') and which are brought into contact in an airtight manner with the electrode bodies (2.1, 2.1'), wherein the connecting cables are conducted out of the electrode bodies (2.1, 2.1') outside of the sealing means (7, 7.1).

2. The electrode pack in accordance with claim 1, characterized in that

the sealing means (7. 7.1) have an encircling seal ring arrangement (7), which is connected in an air-tight manner with both electrode bodies (2.1, 2.1') by connecting means (7.1), and can be pulled off.

3. The electrode pack in accordance with claim 2, characterized in that

the seal ring arrangement (7) has at least one sealing bead (Fig. 1A) formed on each of the facing sides of the electrode bodies (2.1, 2.1') which contain the contact areas (2.2,

VO-706 7 /I

WO 2004/058345 PCT/EP2003/013610

2.2'), which have been brought into congruence in regard to the two electrode bodies (2.1, 2.1') and are connected with each other by the connecting means (7.1), or

at least one seal ring, which encircles the contact areas (2.2, 2.2'), is arranged between the facing sides of the two electrode bodies (2.1, 2.1') and is connected with the electrode bodies (2, 2') on each of its two sides facing the electrode bodies (2, 2') by connecting means (7.1).

- 4. The electrode pack in accordance with claim 2 or 3, characterized in that at least one intermediate layer (6) is arranged between the two contact areas (2.2, 2.2') facing each other.
  - 5. The electrode pack in accordance with claim 1 or 2, characterized in that

the seal ring arrangement (7) is a part of a foil covering the contact area (2.2, 2.2'), which forms at least one insulating intermediate layer (6) between the contact areas (2.2, 2.2') facing each other, wherein each part is connected with an associated electrode body (2.1, 2.1') by a respective connecting means (7.1).

6. The electrode pack in accordance with one of the preceding claims, characterized in that

at least one of the two electrodes (2, 2') is provided with a gripping tongue (4) for pulling the two electrodes (2, 2') apart.

VO-706 8 /I

WO 2004/058345 PCT/EP2003/013610

7. The electrode pack in accordance with claim 6, characterized in that

the at least one gripping tongue (4) is connected to the seal ring arrangement (7), or to the at least one intermediate layer (6).

8. The electrode pack in accordance with one of claims 4 to 7, characterized in that

the intermediate layer (6) is integrated as the active means for an electrical electrode test.

VO-706 9 /I